

REMARKS

Claims 1-43 are pending in this patent application with claims 1-28 being allowed. Claim 9 is objected to based on a grammatical error. Claims 30-32, 36, 38, 39, 42, and 43 were objected to as being dependent on a rejected base claim, but would be allowable if amended to be in independent form. Claims 29, 33-35, 37, and 40-41 (currently rejected) and Claims 9, 30-32, 36, 38, 39, 42, and 43 (currently objected to) are now at issue in this application. Of these, Claims 29 and 33 are independent.

Claim 9 is amended, hereby, in accordance with the Examiner's suggestion to correct an error in verb tense. This amendment is not made for patentability purposes.

Applicants respectfully traverse the rejection of claims 29, 33-35, 37, and 40-41 as anticipated by Konar, U.S. Patent No. 6,535,769 ("Konar"). Reconsideration is respectfully requested.

Each of claims 29, 33-35, 37, and 40-41 recites a controller that uses composite failure codes to determine whether a process should be stopped. As indicated in the specification, these composite failure codes may represent a combination of multiple pieces of failure information such as error codes and operational statuses of various sensors, control loops, and equipment used by, for example, a control module. (See application specification p. 6). Konar fails to disclose the use of composite failure codes of any kind, much less using composite failure codes to determine whether a process should be stopped. As a result, Konar cannot anticipate any of claims 29, 33-35, 37, or 40-41.

While Konar discloses a system which utilizes error codes generated by a programmable logic controller ("PLC") to provide information for error troubleshooting, Konar does not disclose or even suggest that these error codes can be composite failure codes, e.g., made from a combination of multiple pieces of error information. Instead, each

of the error codes of Konar is indicative of a single error event or single piece of error information. Konar does not disclose that these error codes can or should be developed from more than one error event or more than one piece of error information. As a result, Konar discloses only the use of a single error code generated by a PLC to determine whether a PLC should stop operation of equipment under its control and does not disclose or suggest using a composite failure code, as recited by each of claims 29, 33-35, 37, and 40-41. Konar cannot, therefore, anticipate any of claims 29, 33-35, 37, or 40-41.

Furthermore, Konar cannot render any of claims 29, 33-35, 37, or 40-41 obvious because Konar does not, in any manner, suggest that it would be desirable or even possible to use composite error codes for any purpose. In fact, Konar does not recognize any problems associated with the use of individual or single error codes, much less provide a motivation for using composite failure codes. As discussed in the specification, prior art systems, such as Konar, can be very inefficient in processing individual error code information because even medium sized systems generate enormous amounts of failure information. Attempting to continuously analyze all of the individual error codes output by a system inherently slows down monitoring efforts. (See specification page 4). Furthermore, analyzing each single error code separately to determine stoppage of a process ignores situations in which no single error event is enough to cause stoppage of a process, but where the collective existence of multiple ones of these error events should result in a process stoppage.

These problems can be alleviated using composite failure codes which are generated as a combination of multiple pieces of error information or error events. The use of composite failure codes can reduce the amount of data required to propagate failure information while also being able to provide an indication of the collective severity of a combination of failures within a control module, a plurality of field devices, or both.

Stoppages can then be determined based on failure situations that take into account the condition of multiple devices within a process, not just the failure of a single device, which may be relatively unimportant at a particular stage of processing. Thus, unlike the single error codes of Konar and other prior art systems, the use of composite failure codes is able to reduce the information needed to process collective failures and to reduce the need for higher level executory functions used to continuously monitor all devices. (See specification page 6).

It is clear that the prior art must make a suggestion of or provide an incentive for a claimed combination of elements to establish a prima facie case of obviousness. See, *In re Oetiker*, 24 U.S.P.Q.2d 1443, 1446 (Fed. Cir. 1992); *Ex parte Clapp*, 227 U.S.P.Q. 972, 973 (Bd. Pat. App. 1985). This principle holds true even if the applied art could be modified to produce the invention recited by the pending claims. See, *In re Mills*, 16 U.S.P.Q.2d 1430, 1432 (Fed. Cir. 1990); *In re Gordon*, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984) ("The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.") Because Konar does not disclose or even suggest the desirability of combining the single error codes discussed therein to form a composite failure code, much less using a composite failure code to determine stoppage of a process, Konar cannot render any of claims 29, 33-35, 37, or 40-41 obvious.

CONCLUSION

Applicants have now made an earnest attempt to place this case in condition for immediate allowance. For the foregoing reasons and for other reasons clearly apparent, Applicants respectfully request reconsideration and allowance of rejected claims 29, 33-35, 37, and 40-41, as well as objected to claims 9, 30-32, 36, 38, 39, 42, and 43.

Although Applicants believe that no other fees are due, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 13-2855 of Marshall, Gerstein & Borun LLP. In addition, if a petition for an extension of time under 37 CFR 1.136(a) is necessary to maintain the pendency of this case and is not otherwise requested in this case, Applicants request that the Commissioner consider this paper to be a request for an appropriate extension of time and hereby authorize the Commissioner to charge the fee as set forth in 37 CFR 1.17(a) corresponding to the needed extension of time to Deposit Account No. No. 13-2855 of Marshall, Gerstein & Borun LLP.

If there are matters that can be discussed by telephone to further the prosecution of this application, Applicants respectfully request that the Examiner call its attorney at the number listed below.

Respectfully submitted,



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